

Research-Oriented Educational Program in Public Health Psychiatry

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THE MENTAL HEALTH section of the department of epidemiology and public health at the Yale University School of Medicine offers courses of instruction which lead to one of three graduate degrees: master of public health, doctor of public health, and doctor of philosophy. The first two are awarded by the medical school, and the third by the graduate school of the university. Candidates for all three degrees are required to complete the core courses in public health, including public health practice, epidemiology, medical statistics, environmental health, social and psychological factors in medicine, and medical care. The master of public health degree requires 2 years of study, although this requirement is waived rather reluctantly for candidates with a medical degree, who may complete their requirements in 1 year. We consider that the pressures associated with completion in 1 year of the core courses, the required mental health courses, and the thesis result in an overly crowded and therefore relatively unsatisfactory academic program. The doctor of public health degree is open to candidates who have another doctorate; the candidate for the doctor of philosophy degree must also meet the requirements of the graduate school of the university.

The section has accepted students with backgrounds in psychiatry, nursing, social work, social science, and health education. It is

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prepared to offer students combined programs; for example, in mental health and health education, or mental health and community organization. The faculty includes psychiatrists and social scientists. Course work is tailored to the needs of individual students and courses are available by arrangement in other departments of the medical school and the university. Fieldwork placements are designed to acquaint students with community health and welfare problems and with changing practices in the community organization of psychiatric services.

In the curriculum of instruction in mental health, special emphasis is placed on the social sciences. The following courses are offered: introduction to social science concepts, epidemiology and control of mental illnesses, seminars in community psychiatry, seminar in social psychiatry, seminar in psychopathology and behavior, seminar in mental health organization at Federal, State, and local levels, appropriate advanced courses in biostatistics and in the methodology of social research, and fieldwork and research application.

There are two major divergent objectives in the mental health sequence, depending on the interests and the professional goals of the student. One objective is to develop practitioners in community psychiatry who will be especially interested in program development and evaluation; that is, practitioners who recognize that the field of community psychiatry must be subjected to a continuing process of redevelopment and reevaluation, by seeking new applications based upon an understanding of epidemiologic preventive possibilities. The second objective is to train research workers who will bring to the field of mental health a

coherent and consistent point of view on the relation between psychopathology and normal personality functioning, particularly in a social context.

Areas of specialization in mental health research open to students include the five following.

1. Social epidemiology, including the study of the incidence and prevalence of the various psychiatric disorders, their distribution within psychiatric treatment systems, and their distribution by categories of social differentiation.

2. Medical care, including the organization of psychiatric services and its rationale, and the utilization of organizational and interpersonal procedures for the creation of therapeutically effective social environments within psychiatric treatment systems.

3. Personality development in relation to mental health and illness: a study of social, cultural, and socio-psychological factors influencing the child in his development in and toward health and illness; also, the study of patterns of parent-child relationships as culturally determined, and particularly the influence of communicated and distorted beliefs, attitudes, and values, on learning in all its dimensions.

4. Cross-cultural aspects of mental disorder.

5. Research methodology in the study of mental illness. Of major importance is the defining of the mental illnesses for purposes of counting, comparison, and determination of social relevance; also, the identification of variables in relation to psychiatric disturbances which lend themselves to description, measurement, and validation.

Our program of teaching in public health psychiatry seeks to apply public health insights and methods to the epidemiology and control of the mental illnesses. Teaching is based upon the following orientations and assumptions:

- Interest in total populations, such as a total of treated persons (1) or samples of populations at large (2, 3).

- A knowledge of populations based on social science studies, including demographic, social class, and family characteristics of relevant populations; on a study of the use of health and other helping services; and finally on a knowledge of data on social deviance phenomena.

- Interest in a wide range of personality and

behavioral disorders, including psychiatric illness, character problems, and situational difficulties and disturbances. Our teaching is concerned not only with psychiatric illness as medically defined, but in many aspects of social disorganization. For example, it encompasses both the behavioral and educational difficulties of children and youth in schools, the consequences of poverty on personality function and on the utilization of medical resources, and the effects on human experience of current tendencies in urbanization.

- Development of specialized experimental programs of psychiatric services in relation to otherwise neglected problem areas. The purpose of these demonstrations is to explore methods other than the dyadic patient interview for the relief of distress and for social stabilization or to adapt clinical methods to problems which have been hitherto inaccessible.

- An attempt to make explicit a social psychiatric theory of personality functioning based on two fundamental principles.

The first principle is that primary stabilizing forces for the protection of the individual's psychosocial functioning are inherent in the way society is organized and are available for individual utilization as the result of the continuous process of developmental socialization, particularly in the family but also in other social situations, such as in school, with peer groups, and at work. Processes tending to disorganize the social life of the individual are of particular importance, however, in a world of change and are closely but indirectly related to disorganizing trends in personality functioning. The interplay between social-stabilizing and social-disorganizing influences is of paramount interest to students of social psychiatry.

The second principle is that the developmental process in childhood has the guiding functions not only of integrating growth increments but also of coping with and stabilizing characteristic disturbances of psychosocial equilibrium. A basic principle of ego functioning is that equilibrium must be restored at whatever level is possible, that is, an effort at stabilization must be made even if it means that the individual has to live with symptom compromises or with the inclusion of regressed behavior as

a form of adaptation. From this point of view, many psychiatric states may be regarded as the adaptive form or modality most readily available to the individual in his life course.

Empirical uncertainties in psychiatry have become painfully evident in recent years, particularly as the result of epidemiologic and treatment outcome studies. Also, the character of psychiatric illnesses appears to have changed; for example, the so-called process schizophrenia which is considered so essentially germane to an understanding of the illness by European psychiatrists is rarely seen today. Generally the distinctiveness of psychiatric symptom manifestations is no longer so marked, and transitory, mixed, and unclear symptom presentations occur much more frequently than in years past. As our attention shifts from the symptom to the problems which activate it, the symptom itself suffers in explicit formulation by the unsteady and indifferent attention of the observer. However, once interest moves from symptom to problem, the field of psychiatric awareness is entirely new, and the lines of demarcation between psychiatry and the social sciences and between psychiatry and the biological sciences become increasingly difficult to maintain. In other words, it seems pointless to consider psychiatric reactions without looking toward the social and biological contexts in which they occur.

The particular interest of the Yale program lies in understanding the social determinants of psychiatric reactions. The shape assumed by such reactions we consider to be determined not only by the frame of reference of the observer but also by the expectations, the pressures, and the plastic modifications imposed upon the person by his environment. Therefore, reactions alone are unreliable guides to psychiatric illness or disturbance or disability, and we must look elsewhere for the larger context in which they take on meaning and relevance. From our frame of reference, meaning as understood in psychoanalysis is respected and given its proper consideration, but we are also interested in the further elaboration of meanings in the social utilization of symptoms and in the exploitation or integration of symptoms by the individual, his family, his social milieu, and finally by psychiatric treatment itself. These are the areas of exploration which we consider relevant in our orientation to a public health psychiatry.

REFERENCES

- (1) Hollingshead, A. B., and Redlich, F. C.: *Social class and mental illness*. John Wiley & Sons, New York, 1958.
- (2) Srole, L., et al.: *Mental health in the metropolis*. McGraw-Hill Book Co., Inc., New York, 1961.
- (3) Leighton, D. C., et al.: *The character of danger*. Basic Books, Inc., New York, 1963.

Mouse Leukemia Viruses

Scientists at the Public Health Service's National Institute of Allergy and Infectious Diseases are now using an adaptation of the standard complement fixation antibody test to study mouse leukemia viruses grown in tissue culture. They can detect both laboratory-adapted and naturally occurring strains in 2 to 6 weeks. Previously, virus growth could be determined only by inoculating mice and observing them for the development of leukemia—a procedure which requires 3 to 12 months.

The test is based on the observation that the mouse leukemia viruses have at least one major common antigen. With one exception, all produced antigens which reacted positively in the test.

Findings will be used to explore possible antigenic relationships between human and mouse leukemia.

Program Notes

Paying Delinquents to Talk

Syracuse, N.Y., has managed to reduce juvenile crime by paying juvenile delinquents \$2 a week to discuss their problems. Once a week 20 delinquents age 14-20 meet with young men from the Junior Chamber of Commerce and two self-rehabilitated ex-junior delinquents. All 20 have been in jail. From a high of 38 offenses in April 1964, offenses dropped to none in July and 6 in August.

Mouth-to-Mouth Resuscitation

Forty-six Louisiana residents who used mouth-to-mouth breathing to save lives were recently named to the Louisiana State Board of Health's first Life Saver Honor Role. Honorees received merit certificates and letters of congratulation from the board.

Intensive Care for the Retarded

Six to eight severely retarded children, 6 years of age or younger, are being accepted one at a time in an intensive care project of the New Mexico Department of Health. The purpose of this project in Albuquerque is to demonstrate whether intensive habilitative services for severely retarded children in a boarding institution for a limited period will result in appreciable change in their ability to relate socially to others.

Problems of Handicapped

A recently issued "Guide to Washington for the Handicapped" lists more than 525 facilities in the District of Columbia, including hotels, restaurants, tourist attractions, theaters, churches, and public buildings that are completely or partially accessible to handicapped persons with limited mobility.

Nevertheless, only a handful of the hotels described as having negotiable entrances have bathrooms wide enough for the handicapped; only eight welcome blind persons and

leader dogs. Only 11 of the 106 restaurants listed permit leader dogs.

The steps to many monuments prevent visits by the handicapped. And everywhere curbstones block the independent progress of people in wheelchairs still interested in seeing their world.

Women at 65 Live Longer

Life expectancy at age 65 for white women in the United States has improved steadily since 1900-02. For white American men, however, improvement in life expectancy in years at age 65 has been negligible during the last decade:

Year	Male	Female
1900-02-----	11.5	12.2
1949-51-----	12.8	15.0
1962-----	12.9	16.0

The greatest opportunity to markedly increase longevity at the older ages appears to lie in reducing the vast toll from cardiovascular-renal diseases.—*Metropolitan Life Insurance Co. Statistical Bulletin.*

Texas Town Eliminates Privies

Brenham, Tex., has eliminated all privies in town after a 5-year campaign. At bargain-basement prices, city officials picked up plumbing fixtures at closed military installations in the area. These were installed in the homes of indigent families, who contracted to pay \$1.25 a month until the city was reimbursed.

Mental Patients Extramural Club

Hospitalized mental patients from St. Elizabeths Hospital, U.S. Department of Health, Education, and Welfare, who are considered well on the road to recovery participate Saturdays and Sundays in a club in a private house in Washington, D.C. Club members play cards, enjoy badminton, or just chat before the sup-

per "that is always served." The club seeks to build confidence so that the patient can meet the outside when dismissed. Staffed by more than 100 volunteers of many ages and religious faiths, the club is a voluntary Archdiocesan organization, supported by private contributions; it aids persons of any faith.

Montana Adopts Family Planning

The Montana State Board of Health endorsed the principle of family planning at its first 1965 meeting. The board's statement urges that proper information and medical assistance be provided all persons who desire to have a child as well as people who would like to postpone the event.

The board believes that "assistance in family planning should be made available to all who wish it in accordance with individual desires and beliefs and that payment for these services for the indigent and medically indigent is a proper and reasonable use of public funds."

Sharing a Health Officer

Salem County on July 1, 1964, became the fourth New Jersey county to hire a licensed health officer as county public health coordinator. His services as health officer are available to municipalities in the county on a contractual basis. Before that date none of the 15 municipalities in Salem County had a licensed health officer.

The other New Jersey counties using such a system are Atlantic, Cape May, and Cumberland. The system enables municipalities with small populations and small tax bases to secure services of a licensed health officer at moderate cost. A county can thus take a long step toward meeting minimum requirements set by the State department of health.

Items for this page: Health departments, health agencies, and others are invited to share their program successes with others by contributing items for brief mention on this page. Flag them for "Program Notes" and address as indicated in masthead.



Health Statistics From the U.S. National Health Survey. National Center for Health Statistics.

AN INDEX OF HEALTH: Mathematical models. *PHS Publication No. 1000, Series 2, No. 5; May 1965; 19 pages; 25 cents.*

ILLNESS, DISABILITY, AND HOSPITALIZATION AMONG VETERANS, United States, July 1957-June 1961. *PHS Publication No. 1000, Series 10, No. 14; March 1965; 44 pages; 35 cents.*

ACUTE CONDITIONS, INCIDENCE AND ASSOCIATED DISABILITY, United States, July 1963-June 1964. *PHS Publication No. 1000, Series 10, No. 15; April 1965; 51 pages; 40 cents.*

HEALTH INSURANCE, TYPE OF INSURING ORGANIZATION AND MULTIPLE COVERAGE, United States, July 1962-June 1963. *PHS Publication No. 1000, Series 10, No. 16; April 1965; 46 pages; 35 cents.*

CHRONIC CONDITIONS AND ACTIVITY LIMITATION, United States, July 1961-June 1963. *PHS Publication No. 1000, Series 10, No. 17; May 1965; 38 pages; 35 cents.*

FINDINGS ON THE SEROLOGIC TEST FOR SYPHILIS IN ADULTS, United States, 1960-1962. *PHS Publication No. 1000, Series 11, No. 9; June 1965; 31 pages; 30 cents.*

DEMOGRAPHIC CHARACTERISTICS OF PERSONS MARRIED BETWEEN JANUARY 1955 AND JUNE 1958, United States. *PHS Publication No. 1000, Series 21, No. 2; April 1965; 42 pages; 35 cents.*
Sulfur Oxides and Other Sulfur Compounds. A bibliography with abstracts. *PHS Publication No. 1093 (Bibliography No. 56); compiled by Anna Grossmann Cooper;*

1965; 383 pages; \$2.25. Contains 994 numbered abstracts of selected publications on sulfur oxides and other sulfur compounds as they relate to air pollution. Abstracts are arranged under 13 major subject areas such as sources of oxides of sulfur, emission composition, human, animal, and plant epidemiology, control devices, and instrumentation development. Includes title, author, and geographic indexes, and a historical preface on the origins of the oxides of sulfur and their importance in air pollution problems.

Bibliography of Sarcoidosis, 1878-1963. *PHS Publication No. 1213 (Bibliography Series No. 51); by William Mandel, Jesselene H. Thomas, Charles T. Carman, and John P. McGovern; 1964; 229 pages.* Includes comprehensive indexed bibliography of world's literature from earliest description of sarcoidosis through most of 1963. Provides researcher and student with a guide to existing information on basic epidemiologic and clinical aspects of the disease. Bibliography is arranged alphabetically by subject headings with references listed chronologically within each heading. Also contains author index and 50 selected references.

Cancer of the Larynx. *PHS Publication No. 1284, Health Information Series No. 122; 1965; folder; 5 cents, \$2.75 per 100.* Discusses cancer of the larynx, or voice box. Gives symptoms and explains that they might be mild, but should be investigated by a doctor. Discusses diagnosis, treatment by irradiation and surgery, prognosis, and rehabili-

tation when removal of the larynx is necessary.

Research Activities of the National Institute of Mental Health. *PHS Publication No. 1291; 1965; 57 pages; 40 cents.* Describes some of the most recent advances in the Federal Government's mental health program. Mentions more than 175 studies, with emphasis on activities and findings in 10 important areas of mental health. Areas covered are biological, developmental, psychological, and interpersonal factors in mental health and illness; drugs and the treatment of mental illness; psychophysiology and psychosomatic illness; neural mechanisms and behavior; effects of social change and cultural deprivation; the community and its mental health resources; surveys of mentally ill populations and treatment facilities; and international research.

Kidney Diseases. *PHS Publication No. 1307, Health Information Series No. 123; 1965; leaflet; 5 cents.* Describes the kidneys and their functions in the body. Gives diseases that attack the kidneys, the symptoms of the diseases, and treatments. Discusses medical research such as peritoneal dialysis, hemodialysis, and kidney transplantation.

This section carries announcements of new publications prepared by the Public Health Service and of selected publications prepared with Federal support.

Unless otherwise indicated, publications for which prices are quoted are for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402. Orders should be accompanied by cash, check, or money order and should fully identify the publication. Public Health Service publications which do not carry price quotations, as well as single sample copies of those for which prices are shown, can be obtained without charge from the Public Inquiries Branch, Public Health Service, Washington, D.C., 20201.

The Public Health Service does not supply publications other than its own.

PUBLICATION ANNOUNCEMENTS

Address inquiries to publisher or sponsoring agency.

Cancer in California. 1964; 77 pages. California Tumor Registry, State Department of Public Health, 2151 Berkeley Way, Berkeley, Calif. 94704.

Colloquium for Psychiatric Education for Non-Psychiatric Physicians, 1964. Edited by Marion Higman, and Roma K. McNickle. 1965; 40 pages. Western Interstate Commission for Higher Education, University East Campus, Boulder, Colo. 80304.

Dialogues: Behavioral Science Research. Approaches to selected mental health problems. Vol. II. 1965; 66 pages. Western Interstate Commission for Higher Education, University East Campus, Boulder, Colo. 80304.

Planning for Medical Progress Through Education. 1965; 107 pages; \$2. Business Office, Association of American Medical Colleges, 2530 Ridge Ave., Evanston, Ill. 60201.

Homemaker Services. For families and individuals. Public Affairs Pamphlet No. 371. By Evelyn Hart. 1965; 21 pages; 25 cents. Public Affairs Pamphlets, 381 Park Ave. South, New York, N.Y. 10016.

Motion Pictures on Health. 1965; 32 pages. Public Information Office, Pharmaceutical Manufacturers Association, 1155 15th Street NW., Washington, D.C. 20005.

Do It Yourself Again. Self-help devices for stroke patient. 1965; 47 pages. American Heart Association, 44 East 23d St., New York, N.Y. 10010.

Occupational Disease in California Attributed to Pesticides and Other Agricultural Chemicals, 1963. By Goldy D. Kleinman. 1965; 30 pages. Bureau of Health Education, California State Department of Public Health, 2151 Berkeley Way, Berkeley, Calif. 94704.

Control of Radioactive Fallout in Water Systems. A manual for water engineers. 1965; 123 pages. Emergency Health Services, Department of National Health and Welfare, Ottawa, Canada.

The Operation of State Hospital Planning and Licensing Programs. Hospital Monograph Series No. 15. By Hilary G. Fry, Ph.D. 1965; 134 pages; \$2.75. American Hospital Association, 840 North Lake Shore Dr., Chicago, Ill. 60611.

The Addict and the Law. By Alfred R. Lindesmith. 1965; 337 pages; \$7.50. Indiana University Press, Bloomington, Ind.

Medical Care Abstracts. 1965; \$3. Public Health Economics, University of Michigan School of Public Health, Room 3533, Ann Arbor, Mich. 48104.

Understanding and Helping the Narcotic Addict. By Tommie L. Duncan. March 1965; 143 pages; \$2.95. Prentice-Hall, Inc., Englewood Cliffs, N.J. 07632.

Cardiovascular Diseases in the U.S. Facts and figures. February 1965; 30 pages. American Heart Association, 44 East 23d St., New York, N.Y. 10010.

Perspectives for Nursing. Report of the committee on perspectives. March 1965; 31 pages; \$1. National League for Nursing, 10 Columbus Circle, New York, N.Y. 10019.

World Health Organization

WHO publications may be obtained from the Columbia University Press, International Documents Service, 2960 Broadway, New York, N.Y. 10027.

Protein Requirements. Report of a Joint FAO/WHO Expert Group. WHO Technical Report Series No. 301. 1965; 71 pages; \$1.25; Geneva.

Nutrition in Pregnancy and Lactation. Report of a WHO Expert Committee. WHO Technical Report Series No. 302. 1965; 56 pages; \$1; Geneva.

Mechanism of Action of Sex Hormones and Analogous Substances. Report of a WHO Scientific Group. WHO Technical Report Series No. 303. 1965; 24 pages; 60 cents; Geneva.

Neuroendocrinology and Reproduction in the Human. Report of a WHO Scientific Group. WHO Technical Report Series No. 304. 1965; 19 pages; 60 cents; Geneva.

Physiology of Lactation. Report of a WHO Scientific Group. WHO Technical Report Series No. 305. 1965; 22 pages; 60 cents; Geneva.

Public Health and the Medical Use of Ionizing Radiation. Fifth Report of WHO Expert Committee on Radiation. WHO Technical Report Series No. 306. 1965; 44 pages; \$1; Geneva.

WHO Expert Committee on Specifications for Pharmaceutical Preparations. 21st report. WHO Technical Report Series No. 307. 1965; 31 pages; 60 cents; Geneva.

Health Problems of Adolescence. Report of a WHO Expert Committee. WHO Technical Report Series No. 308. 1965; 28 pages; 60 cents; Geneva.

1947-64 Catalogue of World Health Organization Publications. 1965; 114 pages; Geneva.

International Digest of Health Legislation. 1965; 208 pages; \$2.75; Geneva.

Financial Report, 1 January-31 December 1964. Supplement to the Annual Report of the Director-General for 1964 and Report of the External Auditor to the World Health Assembly. WHO Official Records Series No. 142. 1965; 100 pages; \$1.25; Geneva.

World Health Statistics Annual, 1962. Vital statistics and causes of death. Vol. I. 1965; 559 pages; \$16; Geneva.

DURNIN, ROBERT E. (Childrens Hospital of Los Angeles), **GLASSNER, HARVEY F.**, **JORGENSEN, CLINTON O.**, and **FYLER, DONALD C.**: *New approach to heart sound screening in children by analog-digital circuitry.* *Public Health Reports*, Vol. 80, September 1965, pp. 761-770.

In a new approach to analysis of heart-sound patterns by electronic computer circuitry (analog-digital computer), heart sounds of 708 children were analyzed by the unit's analyzing circuitry. Four hundred thirty-eight children had normal heart sounds and functional heart sounds according to the cardiologist's interpretations. The unit recorded 5.9 percent false positives and 1 false-negative case. Two hundred seventy children had heart disease or suspicious murmurs. In this abnormal group, 2 percent false negatives were recorded by the analyzing circuitry.

LUBIN, JEROME W. (California State Department of Public Health), **DROSNESS, DANIEL L.**, and **WYLIE, LARRY G.**: *Highway network minimum path selection applied to health facility planning.* *Public Health Reports*, Vol. 80, September 1965, pp. 771-778.

Effective health facility and services planning requires considerations of relative convenience for patients, physicians, and others in their travel times to alternative hospital locations. Social policy decisions regarding this call for knowledge of the locations of patients' residences, physicians' offices, and the transportation network linking them with hospitals.

Planning for personal health services may be regarded as a special instance of providing public and semipublic facilities. Urban land use location theories indicate the existence of a hierarchy of centers with differing travel times and usage rates and appear pertinent for the health field. The use of specific health services, quantified with respect to travel times, will allow for the formulation of predictive models as data are compiled in a variety of situations.

The computer technique used for this purpose for Santa Clara County, Calif.,

LOCKE, BEN Z. (Public Health Service), and **DUVALL, HENRIETTA J.**: *First admissions to Ohio mental hospitals for mental diseases of the senium, 1958-61* *Public Health Reports*, Vol. 80, September 1965, pp. 779-789.

An analysis of data on 4,443 patients, aged 45 and over and diagnosed as having diseases of the senium on their first admission to Ohio public mental hospitals from July 1958 through December 1961, showed that admission rates were higher for (a) men than women; (b) nonwhites than whites; (c) persons with little or no education than the more educated; (d) divorced and separated persons than those in other marital categories, the lowest rates being among the married; and (e) laborers and farmers than men in other occupations. These findings were consistent with those of an analysis of similar patients admitted in 1948-52, be-

For four of the six false negatives, biphasic R or negative R was recorded by the ECG timing lead. Overall, 0.4 percent false negatives were recorded for the total group of 708.

The initial study indicated that screening for abnormal or suspicious heart sounds by means of an analog-digital computer is possible. Good correlation was noted between the cardiologist's interpretation and computer analysis of specially programed modalities of analysis, namely systole, diastole, and splitting of the second sound.

is essentially that used by transportation planning agencies throughout the nation. The preparation of inputs and their updating are a normal part of continuing transportation planning. Travel times have been calculated among 275 points within the county. The points include census tracts as loci of patient origins, significant clusters of physicians' offices, and hospital locations. The computer format allows the ready inclusion of roads which are not yet built.

Voluntary health planning organizations and State agencies can consider suggested alternative locations of hospitals in relation to present and expected future population distributions. This should also facilitate the selection of appropriate locations for specialized services. If the average size of hospitals in our urbanized society becomes larger to take advantage of the economies of scale, then reliable, detailed travel time information becomes even more necessary.

fore tranquilizers and other psychotropic drugs were available.

Inconsistent with the earlier findings were higher rates among nonmetropolitan men than among men from metropolitan areas. A substantial overall decrease occurred in metropolitan admission rates, yet a slight increase occurred in nonmetropolitan rates.

Admission rates were higher for patients born in States other than Ohio than for those born in Ohio as well as for the foreign-born, although among the foreign-born diseases of the senium were the most prevalent diagnoses.

ROBINSON, GEOFFREY C. (University of British Columbia), **WILLITS, REBA E.**, and **BENSON, KENNETH I. G.**: *Delayed diagnosis of congenital hearing loss in 236 preschool children. Public Health Reports, Vol. 80, September 1965, pp. 790-796.*

A study of the effectiveness of a public health contact in casefinding was undertaken in a series of 236 children enrolled in a preschool hearing program in the Province of British Columbia. A total of 130 children had a public health contact, either when the home was visited or at a child health conference. Hearing loss was suspected in only 31.5 percent of the group at this contact.

When it is considered that nearly half of the children from the metropolitan areas and three-fourths from the provincial area had a public health contact, the casefinding potential of the public health service can be considered impressive.

BRADFORD, LYNDA L. (California State Department of Public Health), **BODILY, HOWARD L.**, **KETTERER, WARREN A.**, **PUFFER, JEAN**, **THOMAS, JUNE E.**, and **TUFFANELLI, DENNY L.**: *FTA-200, FTA-ABS, and TPI tests in serodiagnosis of syphilis. Public Health Reports, Vol. 80, September 1965, pp. 797-804.*

Previous reports have suggested the possibility of substituting fluorescent treponemal antibody (FTA) methods for the more expensive and technically complex *Treponema pallidum* immobilization (TPI) test for the serodiagnosis of syphilis.

This study reports on the reproducibility of the FTA-200 test and compares the sensitivity and specificity of TPI, FTA-200, and FTA-absorption (FTA-ABS) tests.

FTA-200 tests were performed on 200 serums from presumed nonsyphilitic persons. FTA-200 and TPI tests were performed on 514 serums from diagnostic problem patients and 530 serums from patients with all stages of syphilis. FTA-ABS tests, in which the group or common treponemal antibody is absorbed from the test serum before testing, were performed on 200 serums of diagnostic

Some methods are outlined to improve early casefinding by public health personnel and family physicians. Maximum effectiveness of such a program depends on close liaison between family physician, public health agency, and special diagnostic facilities.

Early medical recognition is needed to insure optimal habilitation of children with congenital hearing loss of sufficient degree to interfere with the development of language. It is well known that an unnecessary delay often occurs in referring these children for proper assessment and the initiation of habilitation.

problem patients and 216 serums of syphilitic patients.

The FTA-200 test had a high level of reproducibility and specificity and was significantly more sensitive than the TPI test in primary syphilis and of about equal sensitivity in secondary and early latent syphilis. In late latent and late syphilis, and in diagnostic problem cases, the FTA-200 test was significantly less sensitive than the TPI test.

The FTA-ABS procedure had a comparable level of specificity but was more sensitive than either the TPI or FTA-200 tests.

The FTA-200 test is a useful tool in the serodiagnosis of syphilis, although it cannot entirely replace the TPI test. Preliminary results with the FTA-ABS procedure are promising and indicate a need for additional evaluation.

GREENBERG, NATHANIEL D. (Chicago Board of Health), **STAMLER, JEREMIAH**, **ZACKLER, JACK**, and **ANDELMAN, SAMUEL L.**: *Detection of urinary tract infections in pregnant women: Comparison of methods. Public Health Reports, Vol. 80, September 1965, pp. 805-811.*

Several laboratory methods for assessing the presence of bacteria in the urine have been compared. The quantitative streak-plate method showed an outstanding degree of correlation with the standard bacteriological pour-plate method and was considerably less arduous and less expensive to perform. The chief expense continues to arise from the procedure of collecting aseptically noncatheterized urine specimens from women. At present no way to curtail this expense is ap-

parent. Justification for a relatively expensive detection procedure such as the quantitative, noncatheterized urine culture obviously depends not only on the high prevalence of bacteriuria in some populations but also on its recognized deleterious effect on mother and fetus. Considerable evidence now available also indicates that asymptomatic bacteriuria is frequent and potentially dangerous in adult women whether or not they are pregnant.

KEGELES, S. S. (University of Michigan), KIRSCHT, J. P., HAEFNER, D. P., and ROSENSTOCK, I. M.: *Survey of beliefs about cancer detection and taking Papanicolaou tests. Public Health Reports, Vol. 80, September 1965, pp. 815-823.*

Data on the experience of women who defined cervical tests as cancer examinations were collected as part of a national study. The 35- to 44-year-old white population reported the greatest use of cervical cytology tests for cancer detection. Few women 65 years old or older reported having obtained the tests. Far fewer Negro than white women reported having obtained Papanicolaou smears.

The higher the woman's education, income, and occupational class, the more likely she was to report obtaining the cervical tests. Few of those with a grade-school education, an income of less than \$3,000, or who were the wives of workers in blue collar and service occupations reported that they had cervical examinations. More married than single women reported obtaining the Papanicolaou tests. Most tests were obtained at the offices of private physicians, primarily as a part of visits for other examination procedures.

The beliefs of the women in regard to cancer were analyzed. It was found that

the cervical tests were obtained by a significantly greater number of women who believed that professional judgment is better than self-diagnosis and that early diagnosis of cancer is beneficial than those who did not have these beliefs. Within every demographic classification, more women who held these beliefs reported obtaining cervical tests than the women without these beliefs.

Four separate but interrelated programs were proposed to increase the use of cervical cytology tests: (a) the necessity of inducing more private physicians to take cervical smears, (b) the continuing use of cervical tests in the offices of physicians supplemented by a clear explanation to patients of the benefits of periodic cervical examination, (c) a mass-information program alerting women to the need of professional diagnosis and the benefits of early diagnosis of cervical cancer, and (d) person-to-person solicitation of those women who were not likely to be reached by mass communications.

SURGALLA, MICHAEL J. (U.S. Army): *Pasteurella pseudotuberculosis information as background for understanding plague. Public Health Reports, Vol. 80, September 1965, pp. 829-832.*

Information on the occurrence of *Pasteurella pseudotuberculosis* in man and animals of North America is needed as background for understanding the problem of plague. *P. pseudotuberculosis*, which can cause human infections with symptoms of appendicitis, is so closely related to the plague bacillus that a real understanding of one disease will have to include an understanding of the other. Support for this view is derived from information on the immunological

relationship between *P. pseudotuberculosis* and *Pasteurella pestis*, their antigenic similarity, the pesticin-fibrinolysin-coagulase activities of *P. pestis*, the dissociation of *P. pestis* in the direction of *P. pseudotuberculosis*, and the reversible alteration of *P. pseudotuberculosis* characters in the direction of *P. pestis*. A small effort added to standard procedures by persons not concerned primarily with research could yield the needed information.

FOSTER, STANLEY O. (Public Health Service): *Trachoma in an American Indian village. Public Health Reports, Vol. 80, September 1965, pp. 829-832.*

A demographic survey to determine the trachoma pattern was conducted in Blackwater, Ariz., in the spring of 1963. Four hundred and four Pima Indians were examined for trachoma in a house-to-house survey. Active trachoma was diagnosed in 44 persons, a prevalence rate of 10.9 percent. An additional one-third of the population showed signs of previous infection with trachoma.

The maximum age-specific prevalence rate of active trachoma, 36 percent, occurred in 8- and 9-year-olds. In children under 16, the prevalence rate of active trachoma for the 98 boys (25.5 percent) was significantly higher than for the 122 girls (14.0 percent).

There is a significant reservoir of infection in preschool children, probably explaining the inability of school-oriented treatment programs to control the disease. The data also show a clustering of disease activity within specific family groups, supporting the concept that intra-familial spread is the predominant mode of transmission.

A followup home treatment program of active cases was instituted. Twelve months after completion of the therapy, biomicroscopic examination of 26 school children showed a decline in the first-grade prevalence rate from 71 percent in 1962 to 19 percent.